Wofford College

STUDENT-FACULTY COLLABORATIVE SUMMER RESEARCH

Summer 2019
Blake Bagwell ’22 is pursuing a B.S. in biology. Bagwell worked at the Goodall Environmental Studies Center in Glendale completing archaeological and geophysical work as an extension of the Interim in which he participated this past January.

**Faculty mentor:** Dr. Terry Ferguson, associate professor of environmental studies and senior researcher for the Goodall Environmental Studies Center

Jalen Carter ’21, a psychology and sociology and anthropology major with a minor in philosophy from Clinton, S.C., assisted in research studying the emotional effects on human cognition as well as how stress impacts the college experience of first-generation students. He was able to further develop and apply his knowledge of psychology while participating in this study with the hopes of being published in an established psychological journal. On campus, Carter is an iCAN mentor, a Gateway Scholar, the president of Wofford Men of Color, a Wofford student advocate on the Judicial Commission and a member of the Black Student Alliance. After graduating, he plans to attend law school.

**Faculty mentor:** Dr. Katherine Steinmetz, associate professor of psychology

Ethan DiBlasio ’22 is a chemistry major from Spartanburg, S.C. Over Interim of 2019, DiBlasio took a class called Living in a Microbial World, which looked into the role that microbes play in our daily lives. As a continuation of that research, DiBlasio and two classmates investigated the antibiotic resistance associated with probiotic strains of bacteria. This 10-week research project was based on the
following question, “Does a commonly used probiotic containing L. rhamnosus carry antibiotic resistance genes?” According to DiBlasio, little is known about the potential risks of these probiotic strains. DiBlasio is a member of the club tennis team and serves as the rush chair for Wofford’s Alpha Phi Omega chapter.

**Faculty mentor:** Dr. Tracie Ivy, assistant professor of biology

**Jara Dogan ’22,** an English major with a concentration in creative writing, is president of Gospel Choir, a Bonner Scholar and a Gateway Scholar, and a member of Wofford Women of Color, the Black Student Alliance and the Presidential Committee on Diversity and Inclusion. As a census researcher for the Back of the College project, Dogan used city directories to determine which neighborhoods were considered part of the Back of the College area and which citizens called that area home. She was also part of the website design committee and helped create the layout and the functionalities of the website, including creating wireframes, color templates, text and interactive maps.

**Faculty mentors:** Dr. Jim Neighbors, professor of English, and Dr. Kimberly Hall, assistant professor of English

**Peyton Godwin ’21,** from Raleigh, N.C., is in the pre-dental program and is majoring in biology with a minor in German. After using lab skills and knowledge acquired during the Interim class, Living in a Microbial World, she and a team of students and faculty researched antibiotic resistance in probiotics. Godwin says even though the commercial use of probiotics has increased over the past decade, little research has been done with regards to the risks and safety of these products, specifically the risk of transferring antibiotic-resistance genes to pathogens. Godwin hopes to continue research throughout college and dental school.

**Faculty mentor:** Dr. Tracie Ivy, assistant professor of biology
Mariana Gonzalez ’21 is a first-generation college student and a Bonner Scholar. Gonzalez worked with the Summer Food Program sponsored by the Spartanburg Housing Authority. This program, funded by the U.S. Department of Education, ensures that children of all households and income levels have the opportunity to eat during the summer months. Gonzalez also worked at Wofford completing a 10-week student-faculty research project. The project, a continuation of research she did during summer 2018, involved collaboration with the Spartanburg Academic Movement to record day-in-the life stories from the Highland and Forest Park neighborhoods. Gonzalez and her teammates also looked at out-of-school-time for Latinx students in the 29303 area code. Gonzalez used her Bonner summer of service in the Latinx community that she calls home.

Faculty mentors: Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

David Hickman ’20, a philosophy and history major from Waynesboro, Ga., researched the Buddhist Apoha Theory and its possible applications to the philosophy of mathematics. Hickman hopes that more students, especially those studying the humanities, will feel encouraged to do summer research.

Faculty mentor: Dr. Jeremy Henkel, assistant professor of philosophy

Eli Horner ’20, a mathematics major with a minor in computer science from Chapin, S.C., spent the summer researching the mathematics of gerrymandering. He learned about the process of redistricting and gerrymandering and studied different techniques that mathematicians use to detect gerrymandering and gerrymandered districts. Horner also created educational materials on the topic to help inform the public about why detecting and stopping gerrymandering is important.

Faculty mentor: Dr. Anne Catlla, associate professor of mathematics and dean of center for innovation and learning
Mary Claire Kinnas ’20 helped design a pilot study on how first-year college students react to and remember faces and personality descriptions, and she found articles that were read and discussed in the weekly team lab meetings. As a psychology and French major, Kinnas hopes to continue working on studies to further understand memory.

**Faculty mentor:** Dr. Katherine Steinmetz, associate professor of psychology

Max Lefebvre ’21, a history and German major with a minor in music from Spartanburg S.C., participated in a research project at the Goodall Environmental Studies Center in Glendale, S.C. The project focused on the geological and archaeological history of the Glendale mill area. Lefebvre says the project allowed him to apply the skills and knowledge that Wofford has given him to real-world scenarios.

**Faculty mentor:** Dr. Terry Ferguson, associate professor of environmental studies and senior researcher for the Goodall Environmental Studies Center

Mayra Lomeli-Garcia ’21, a psychology major and business minor from Charleston, S.C., conducted a collaborative community-based research internship for 10 weeks. An on-going research collaboration with community partners, the research focused on amplifying Latinx voices in the community by gathering qualitative data through phenomenological observation and conducting reflective interviews with local Latinx community members. She is an iCAN Spartanburg fellow and mentor. She is also a program guide at the Children’s Museum of Spartanburg. Lomeli-Garcia served as president of the Organization of Latin America Student during 2018-19.

**Faculty mentors:** Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures
Sandra López ’21, a native of Enoree, S.C., interned at the Spartanburg Housing Authority and continued her research collaboration from summer 2018. The main focus of the community-engaged qualitative research has been on improving outcomes for children and youth in Spartanburg, S.C. López conducted interviews and collected observations by interviewing individuals in the Latinx community. She used her training in Socratic-Hermeneutic interview methodology and the ethics of interviewing. Community collaborators, including the Spartanburg Academic Movement and the Mary Black Foundation, intend to use the research to affect change in Spartanburg. López is a Bonner Scholar, a Gateway Scholar, an iCAN mentor, and a member of Wofford Women of Color, the Organization for Latin American Students and the college’s track and field team.

Faculty mentors: Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

Nolan Lory ’21, a native of Raleigh, N.C., is a chemistry major in the pre-dental program. Lory performed research to learn more about the aromatic organic chemicals that originate when spirits are made based upon different yeast strands and recipes. A member of Wofford Men vocal performance group and a Wofford Admission Ambassador, Lory is studying to take the DAT in the spring. The opportunity to conduct research has fed his curiosity about the world.

Faculty mentor: Dr. Zach Davis, assistant professor of chemistry

Emily K. Moore ’22, a native to Spartanburg, S.C., researched the effects of Ebola’s secreted glycoprotein on immune system cells at Edward Via College of Osteopathic Medicine in Spartanburg, S.C. Moore says there is little known about the protein, so the goal of her research was to discover if it has any effects on our immune system’s dendritic cells. Moore worked to maintain and run experiments on the cells and determine more about the protein’s function and what makes the Ebola virus so deadly. As a biology major, she hopes to continue researching the Ebola virus.

Faculty mentor: Dr. Stefanie Baker, professor of biology
Claire Minter ’22 is from Charlotte, N.C., and intends to pursue a double-major in English and government. Her interest in national security led her to research the relationship between American national identity and surveillance. In addition, Minter worked with the EvaluateUR program to provide the Wofford community with an established program for summer research opportunities.

Faculty mentors: Dr. Carolyn Martsberger, assistant professor of physics, and Dr. Kimberly Hall, assistant professor of English

Hector Ortiz ’22, a native of Saluda, S.C., conducted research focused on improving outcomes for children and youth in Spartanburg. Through partnerships with the Spartanburg Academic Movement, the Mary Black Foundation and other organizations, the research opened doors and created connections across the Spartanburg community. In addition to his research, Ortiz also interned at St. Luke’s Free Medical Clinic. Ortiz is Bonner Scholar, Gateway Scholar, iCan mentor and is secretary for the Organization of Latin American Students.

Faculty mentors: Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

Alex Rizzo-Banks ’21, a native of Asheville, N.C., worked as a part of a research and design team tasked with memorializing the Back of the College, an African-American neighborhood that previously existed behind Wofford College. Rizzo-Banks helped to design the groundwork for a website that will allow people to explore the history of the neighborhood. He says the research has broadened his perspective of the world, and he wants to share that experience and the memories of this community. As an economics major with minors in film/digital media and Arabic, he wants to use his education and his background to connect with and understand people all over the world.

Faculty mentors: Dr. Jim Neighbors, professor of English, and Dr. Kimberly Hall, assistant professor of English
Daniela Samaniego-Gonzalez ’20, an international student from Ecuador, conducted research in the biochemistry field. She attempted to extract and purify urease from germinating pea seeds. During this experience, she was able to learn a variety of lab techniques, as well as what it is like to do research. Since she is planning to pursue a career in chemistry, she says this opportunity has been a wonderful learning experience. Samaniego-Gonzalez is a Spanish tutor, a Writing Center tutor and a teacher’s assistant for the chemistry department.

Faculty mentor: Dr. Ramin Radfar, professor of chemistry

Maddie Schutte ’21, a chemistry major and native of Charleston, S.C., researched stress and memory as a recipient of a South Carolina Independent Colleges and Universities grant. She read literature, analyzed data and brainstormed new ways to further studies in this area. Schutte hopes that the data she collected will contribute to the accuracy of eyewitness identification. She wants to attend medical school after she graduates and believes that this research project will further her knowledge of the scientific world and will help in the future.

Faculty mentor: Dr. Katherine Steinmetz, associate professor of psychology

Marcus Stallings ’21, a biology and Spanish major from Fort Mill, S.C., researched the possible side effects of probiotics. Stallings and two of his classmates investigated the safety of probiotics – specifically whether probiotics transfer antibiotic-resistance genes to harmful bacteria. Stallings is a student-athlete on the Wofford rifle team. After graduating, he plans to attend medical school.

Faculty mentor: Dr. Tracie Ivy, assistant professor of biology
Jay Stevens ’22, a Spartanburg, S.C. native, is majoring in finance and Spanish with a minor in business. Stevens researched early childhood development and out-of-school time for Latinx youth in Spartanburg. During this 10-week research project he assisted and improved opportunities for students from his hometown. Stevens says he has always had a passion for learning and mentoring young children.

Faculty mentors: Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

Payton Stott ’22 is an environmental studies major from Columbus, N.C. As an extension of his January Interim project, Stott performed archeology and geophysical research in Glendale, S.C., and the surrounding Glendale mill area.

Faculty mentor: Dr. Terry Ferguson, associate professor of environmental studies and senior researcher for the Goodall Environmental Studies Center

Naya Taylor ’21, a native of Boiling Springs, S.C., is a Bonner Scholar and biology and Spanish double major. Taylor’s research focused on children and youth in Spartanburg and the barriers that prevent them from thriving educationally and socially. After graduating, Taylor plans to pursue a career as a physician assistant or surgeon.

Faculty mentors: Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

Cat Todd ’22, a sophomore from Camden, S.C., was a census researcher with the Back of the College project. Todd’s favorite part of the project was being able to connect with and listen to people.

Faculty mentor: Dr. Jim Neighbors, professor of English
Alexis Tomlin ’22 is a biology and mathematics major from Myrtle Beach, S.C. Tomlin researched the occurrence and transmission of the Zika virus in South America. Tomlin hopes this research will produce a statistical model that will aid preparation and treatment of the disease. Tomlin plans to continue her research and present her findings at MathFest in 2020. She is a member of the women’s basketball team and serves on the Student Athlete Advisory Executive Committee.

**Faculty mentor:** Dr. Deidra Coleman, assistant professor of mathematics

Jenna Vroman ’21, a biology and Spanish double major and native of Charleston, S.C., researched the effects of stress on memory. Vroman created hypotheses, collected data and analyzed information related to stress and memory. She hopes to continue the research and eventually to pursue a career as a veterinarian.

**Faculty mentor:** Dr. Katherine Steinmetz, associate professor of psychology

Calin Wharton ’21 is an accounting major with business and finance minors. Wharton worked as a researcher for the Back of the College project. She is now the student event specialist for the 2019-20 academic year. Through these events she makes connections and creates a sense of community and well-being.

**Faculty mentor:** Dr. Jim Neighbors, professor of English

Joe Zavell ’20, a biology major and native of Charleston, S.C., is planning for a future career in medicine. His research involved identifying genes that regulate cell division in symbiotic algae within coral cells. He hopes that this research will help scientists understand the impact of climate change on coral reefs. Zavell also volunteers at a holistic medical practice in Charleston, where he is learning about new and alternative forms of medicine.

**Faculty mentor:** Dr. Geoffrey Mitchell, assistant professor of biology
Erika Andrade ’20, a chemistry major from Mt. Pleasant, S.C., conducted research at Medical University of South Carolina in a cancer and immunology lab. The focus of the research was on PD-1/PD-L1 immune checkpoint inhibitors and various cytokines that stimulate the immune system and strengthen the ability of our bodies to fight cancer.

Sam Padula ’20, a Cambridge, Mass. native and mathematics major, participated in research at Harvard Medical School through the support of the Papadopoulos Scholarship. As part of Dr. Jeremy Gunawardena’s mathematical biology group, Padula’s research focused on the mathematics behind a gene editing tool.

Savannah Talledo ’21, a chemistry and theatre major from Spartanburg, S.C., researched at the University of Delaware. Her research focused on nano aerosols and how they interact with the atmosphere.
David Aguillard ’19 graduated with degrees in physics and mathematics. Aguillard worked at Wofford measuring the complexity in brain and heart waves to find correlations between the measurements and memory performance. Previously, Aguillard has participated in research at Wake Forest University and in Geneva, Switzerland.

Faculty mentor: Dr. Carolyn Martsberger, assistant professor of physics

Brook Baird ’19, a native of Knoxville, Tenn., graduated with degrees in economics and Spanish. While at Wofford, she completed research on the BMW plant in Spartanburg, S.C. Through legal research and interviews, her project explores the use of eminent domain for private takings and commemorates the procurement process of the Spartanburg plant. Baird presented her research at the Future of Jobs Conference in Winston Salem, N.C.

Faculty mentors: Dr. John Fort, associate professor of economics; Dr. Timothy Terrell, Stackhouse Professor in Economics and Business; and Dr. Richard Wallace, retired professor and chair of economics

Meghan Curran ’19, a native of Savannah, Ga., graduated with degrees in French and intercultural studies. After spending semesters studying abroad in Paris, Tunisia and Israel, Curran combined her interests in food, the Middle East and interfaith work to create her multimedia project, “Israel: Intercultural and Interfaith Exchange through Food.” The project focuses on the multiculturalism in Israel and considers the pedagogical value of food tourism, its downfalls and how food can be both a subject of and vehicle for intercultural and interfaith exchange in Israel.

Faculty mentors: Dr. Kim Rostan, associate professor of English; Dr. Catherine Schmitz, associate professor of modern languages, literatures and cultures; and the Rev. Dr. Ron Robinson, Perkins-Prothro Chaplain and Professor of Religion
Emma Fletcher ’19, a graduate with degrees in humanities and art history, focused her senior capstone on interactivity in museums. She created lesson plans and programs for the Boys and Girls Club of Mary H. Wright Elementary School in Spartanburg, S.C. These programs focused on keeping the students engaged and inspired to learn more about the arts and creativity. Fletcher presented her research at the Association of Academic Museums and Galleries annual conference in Minneapolis, Minn.

**Faculty mentor:** Dr. Youmi Efurd, curator of art and art history

Kathleen Hughes ’19, a graduate from Greenwood, S.C., spent a week in Molde, Norway at the International Human Science Research Conference presenting research she conducted in the summer of 2018. The project focused on amplifying Latinx voices in Spartanburg, S.C., through phenomenological interviews and observations.

**Faculty Mentors:** Dr. Christine Dinkins, William R. Kenan Jr. Professor of Philosophy, and Dr. Laura Barbas Rhoden, professor of modern languages, literatures and cultures

Alexis J. Eaton ’19, originally from Chattanooga, Tenn., majored in government and minored in sociology and anthropology. Eaton’s research project evaluated the effects of food insecurity on college campuses. She used Wofford College and Wofford students for her research. The project sought to understand causes and effects of food insecurity on students while investigating administrative response to these issues. Eaton says the purpose of this research was to create a dialogue between students, faculty, staff and administration about food insecurity.

**Faculty mentor:** Dr. Rhiannon Leebrick, assistant professor of sociology and anthropology
Special thanks to:
Lynne Casalino
Brian Lemere
Members of the community who have supported these research projects
Michelle Smith
Julie Stott
Office of Marketing and Communications
Office of the Provost
Office of the President

Interested in learning more about summer collaborative research opportunities at Wofford College?

Please contact Dr. Ramón Galiñanes Jr.,
director of undergraduate research and post-graduate fellowships, at galinanesr@wofford.edu or Rebecca Parrish, grant specialist, at parrishrr@wofford.edu.